

Integration of Renewable Resources Project

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Presented to the

CEC Committee Workshop on the Mid-Course

Review of the Renewables Portfolio Standard Process



CAISO Renewables Integration Program

Primary Goal(s) / Objectives:

One of the ISO Corporate Goals for 2006 is to develop a plan for supporting State policy regarding renewables. This plan is sponsored at the Officer level at the ISO. It brings together the many separate efforts within the ISO required to the support of the State's 2010 RPS Goal.

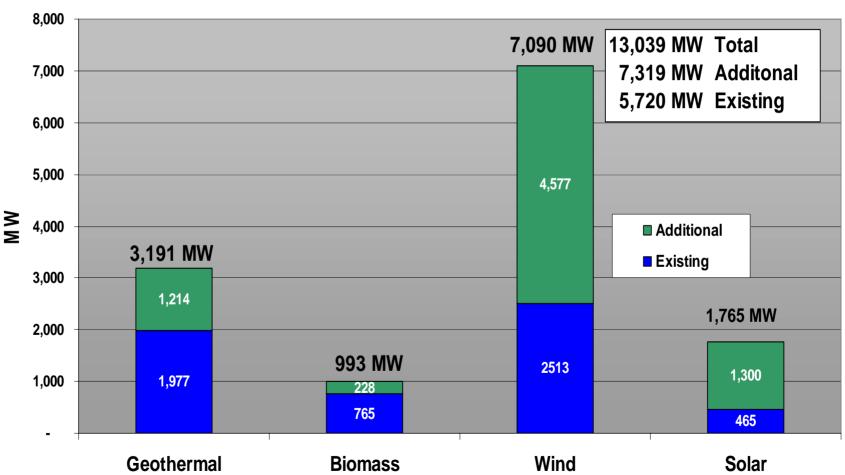
This is a coordinated program to manage the integration of renewable resources into CAISO's

- Transmission planning
- Markets, and
- Operations

The ISO supports the State's goal of 20% of customer load being served by renewable resources by the end of 2010 and 33% by 2020.



Existing California Renewable Generation and Possible Additions to meet the 20% RPS Goal by 2010*



^{*} Data on additional renewable resource is based on a current CEC studies on renewables. Potential retirements of existing resources and repowering projects are not included.

CAISO Renewable Resources Project Timeline													
Task #	Task Description			2006		ļ		2007			2008		
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
	Transmission Planning			,				Boa	rd			,	
1	Northern California Transmission Plan					1		Deci					
2	Southern California Transmission Plan				Board Decision	on _							
	Petition FERC for a Declaratory Order for justification of transmission projects that support State programs such as			uest	Tariff Filing	Board Decisi							
3	interconnection of renewable resources Coordinated Transmission Plan for entire ISO area							-	-	Boa Dec	ard ision		
											_		
5	Evaluation of new Storage Technology									,			
	Markets and Operations Issues				,								
6	Integrate PIRP into MRTU												
	Develop new forecasting program for Intermittent Resources to												
7	support Generating Unit Commitment Decisions					1,							
	Modify allocation of excess marginal loss revenues in MRTU. Topic					M R T		Release					[
	to be included in MRTU Release 2 stakeholder discussions slated					Deci	sion	stakehol likely be					uld
8	for the 3rd quarter of 2006			-		\mathbb{H}		incly be	Impleme	nted in 20)03 at till	- cariist.	
9	Develop new Ramp Forecasting and Planning tool for real time ops												
	Develop agreements and procedures for renewables to follow												
10	dispatch orders from the ISO				_			4					
11	Import/Export of Intermittent Resources between control areas						Tar Fili		ard cision				
	PIRP - Participating Intermittent Resources Program												
12	Analyze PIRP implementation issues & recommend changes			_									
13	Improve forecast accuracy & use of bias adjustment factor		_		Board								
14	Explore tariff changes for export of PIRP energy				Decision	1							
15	GMC Impact on Wind Generators in PIRP			•	1								
16	Negotiate changes with wind generation forecasting service			_	_	_							
17	Implement changes to ISO's PIRP Program					_	-	_				_	
	Treating 9 Manitoring												
18	Tracking & Monitoring Work with CEC on Scheduling & Tagging "green energy"												
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10	Support the CEC IAB Study on Integration of Benevichle Benevichle					Repor Publis				ed for Reerations		Adequad	у
19 20	Support the CEC IAP Study on Integration of Renewable Resources Federal Renewables Initiatives					Labits	eu	Pictinit	5 and op	5,440110	p. 0,0013		
21	State Renewables Initiatives - Governor's Office, CEC, CPUC												
22	WECC Renewable Resources Task Force												
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